

Statement of Work – Installation of Water Storage Tanks

Background

The purpose of this contract is to design and install a 7 meter elevated 100 cubic meter capacity galvanized steel water tank at the ILEA facility to provide a reliable supply of water to those facilities. ILEA is located at the Botswana Police College 45km south of Gaborone along A1 road to Lobatse from Gaborone near Mogobane /Ranaka turn off in the South east district.

The work to be performed under this purchase order includes but not limited to furnishing all labour, materials, tools and equipment necessary to design, fabricate, construct, inspect and test a bolted galvanised steel elevated water storage tank supported on a steel support structure including foundation and accessories.

The portable water tank capacity shall be 100 cubic meters complete with stand and all its necessary accessories for full functionality of water storage. The tank should be filled up with water from another elevated tank using gravity and supply two story facilities. The tank shall be located approximately 20 meters from the street as noted in the pre-bid meeting.

Bidding Requirements

This is a full turn-key project where the contractor shall design, supply, and erect the specified water tank. The contractor is responsible for all aspects, including for those not specifically noted in the requirements below. This is a firm-fixed price contract in which any omissions or under-estimations in bidding is the sole responsibility of the contractor and differing site conditions may not be claimed for additional compensation. Quotations should factor in the requirements outlined in “Project Requirements” and “Management and Supervision.” The quotation should be sufficiently broken down so that a technical and price evaluation can be made to determine if the price is fair and that the contractor understands the requirements. All previous information provided is for information purposes only and bids should not be based on previous bill of materials.

Bids are due July 14, 2016 by 16:00. Bids will only be accepted via email at gabprocurement@state.gov

Project Requirements

Geotechnical Survey: The contractor shall conduct a geotechnical survey of the site to determine the composition of the soil so that the proper excavations, backfill, and compaction can be specified by the contractor’s professional engineer doing the design.

Design: The contractor shall specify the excavation, backfill and compaction of the ground around the water tank. The contractor shall design the foundation and slab. This includes the calculated concrete density, quality, rebar, and reinforcement pattern. The contractor shall design a 7 meter elevated structure

to support the water tank accounting for wind, seismic, and weight factors. The contractor shall design the galvanized steel water tank. The contractor shall design all plumbing systems. Once the designs, specifications and shop drawings are completed, they shall be submitted to the Contracting Officer for review and approval before commencing work. Drawings, specifications and designs shall be signed off and approved by an engineer with the appropriate credentials.

Permits and Approvals: The contractor shall obtain all appropriate permits and approvals from local authorities prior to the commencement of any work.

Site Clearing: The contractor shall clear the brush and trees from the worksite to allow for access to the worksite and to prevent the possible damage to the structure from roots and other vegetation.

Excavations: Excavations shall be done in accordance to the requirements outlined in the OSHA document “Trenching and Excavation Safety” <https://www.osha.gov/Publications/osh2226.pdf>

Backfill and Compaction: The contractor shall backfill and compact the subsurface material to the requirements specified in the design.

Foundations: The contractor shall install a foundation on the prepared subsurface meeting the specification and design. Prior to pouring concrete, the contractor shall demonstrate that the reinforcement meets the design specification. Concrete shall be mixed offsite and delivered. The contractor shall make and test 150 x 150 x 150mm concrete cube and provide third party lab results demonstrating that the concrete meets the designed specification.

Structure: The contractor shall install the superstructure for the tank as specified in the design to a height of 7 meters. A catwalk shall be installed around the perimeter of the tank. A top railing shall be installed around the catwalk at 110 cm high. Railing must be able to withstand a side force of at least 90KG when applied within 5 cm of the top. A midrail shall be installed at a height of 53 cm and must be able to withstand a side force of 68 kg. A permanent welded metal ladder with safety cage shall be installed to the catwalk and also to the top of the tank. Anchor points supporting 2000kg for safety harness anchoring system must be provided to allow safe work at elevated heights where safety railing is not available.

Water Tank: The water tank shall be installed on top of the structure. The capacity of the tank shall be 100 cubic meters. The construction of the tank shall be hot dipped galvanized steel. A closed and lockable manhole on the top shall be 1 meter by 1 meter to allow access for maintenance. The manhole lid shall provide a tight seal to prevent entry of contaminants.

Plumbing:

- The contractor shall connect to the existing 110mm plastic water main. The contractor may run underground 110mm plastic piping to match the existing line. Once above ground plumbing shall be galvanized steel piping to the tank.
- Plumbing shall be designed to flow only in one direction. Isolation A bypass valve shall be installed to bypass the tank.
- A float and cutoff valve shall be installed in the tank to prevent overfilling.

- The contractor shall also install separate piping to the top of the tank to the outside of the fence to allow a water truck to deliver water to the tank if necessary. Piping and connects shall be meet the requirements for a fire department connection with a female coupler that is rigid mounted at a height of 1 meter above the ground.
- Install 150 mm drain at the bottom of the tank and 150 mm overflow above the float cutoff level to prevent overfilling.
- All appropriately sized valving, elbows, joining sets, etc as designed shall be installed.

Fence and Ground Cover: The contractor shall install a chain link fence 2 meters tall set back from the perimeter edge of the foundation 12 meters. The double entrance gate shall be a width of 4 meters and lockable. The contractor shall clear the area from the foundation to 1 meter outside the fence line to bare dirt. Once the area is cleared and the ground leveled, the contractor shall apply of weed and pest spray to prevent bugs and weeds from infesting the ground. Then the contractor shall place a fabric weed barrier over the cleared surface area and cover the area with crushed gravel between 1-3cm in diameter at an average depth of 5 cm.

Trash and Debris Removal: The contractor is responsible for removing from site all soil, vegetation, and construction debris.

Water, Power and Toilets: The contractor is responsible for providing water, power, and toilets to perform all work.

Management and Supervision

Schedule: Within 10 days of award the contractor shall provide a complete and accurate project schedule to include all aspects of the project including lead times for delivery of materials.

Supervision: The Contractor shall designate a representative who shall be responsible for on-site supervision of the Contractor's workforce. This supervisor shall be the focal point for the Contractor and shall be the point of contact with U.S. Government personnel. The supervisor shall have sufficient English language skill to be able to communicate with members of the U.S. Government staff.

Safety Training: The Contractor shall train its employees on safe work practices for the tasks they perform.

Monitoring Safe Work: The Contractor shall regularly verify that their employees are performing their work safely. Workers found to be performing their work in an unsafe manner shall be retrained or coached as needed. If the Contractor's employee continues to work unsafely they shall be removed from the contract.

Personal Protective Equipment (PPE): The Contractor shall provide to and require that their employees wear Personal Protective Equipment appropriate for the task they are performing. This may include, but not be limited to proper footwear, respiration protection, hearing protection, eye protection, hand protection, and sun protection. If the equipment is damaged or worn out, it must be properly disposed of and replaced. PPE shall be approved by the Contracting Officer's Representative (COR).

Material Safety: It is the contractor's responsibility to ensure the safe handling, application, removal and environmentally sound disposal of all hazardous or potentially hazardous materials and chemicals.

Incident Reporting: The Contractor shall immediately report to the COR any injuries to an employee, requiring more than first aid while working on this project.

Safe and Proper Use of Tools

- **Tools and Equipment Requirement:** The Contractor shall provide all tools, equipment, supplies and fuel to fulfill the requirements of this contract.
- **Proper Use of Tools and Equipment:** The Contractor shall only use the tools and equipment for their intended purpose. Tools and equipment must be maintained in good working order. All guards and safety protections must remain in place and be used on powered equipment. Broken and less than optimally functional tools should be repaired or replaced.
- **Training on Use of Tools and Equipment:** The Contractor shall train their employees on the safe and proper use of tools and equipment.

Quality Control and Quality Assurance

This plan is designed to provide an effective surveillance method to promote effective contractor performance. The QASP provides a method for the Contracting Officer's Representative (COR) to monitor contractor performance, advise the contractor of unsatisfactory performance, and notify the Contracting Officer of continued unsatisfactory performance. The contractor, not the Government, is responsible for management and quality control to meet the terms of the contract. The role of the Government is to conduct quality assurance to ensure that contract standards are achieved.

Surveillance: The COR will receive and document all complaints from Government personnel regarding the services provided. If appropriate, the COR will send the complaints to the Contractor for corrective action.

Standard: The performance standard is that the Government receives no more than one (1) customer complaint per month. The COR shall notify the Contracting Officer of the complaints so that the Contracting Officer may take appropriate action to enforce the inspection clause (FAR 52.212-4, Contract Terms and Conditions-Commercial Items), if any of the services exceed the standard.

Procedures:

- If any Government personnel or designated representative observe unacceptable services, either incomplete work or required services not being performed they should immediately contact the COR.
- The COR will complete appropriate documentation to record the complaint.
- The COR determines the complaint is invalid, the COR will advise the complainant. The COR will retain the annotated copy of the written complaint for his/her files.

- If the COR determines the complaint is valid, the COR will inform the Contractor and give the Contractor additional time to correct the defect, if additional time is available. The COR shall determine how much time is reasonable.
- The COR shall, as a minimum, orally notify the Contractor of any valid complaints.
- If the Contractor disagrees with the complaint after investigation of the site and challenges the validity of the complaint, the Contractor will notify the COR. The COR will review the matter to determine the validity of the complaint.
- The COR will consider complaints as resolved unless notified otherwise by the complainant.
- Repeat customer complaints are not permitted for any services. If a repeat customer complaint is received for the same deficiency during the service period, the COR will contact the Contracting Officer for appropriate action under the Inspection clause.

Evaluation Factors

The Government intends to award a purchase order resulting from this solicitation to the lowest priced, technically acceptable offeror/quoter who is a responsible contractor. The evaluation process shall include the following:

Compliance Review: The Government will perform an initial review of proposals/quotations received to determine compliance with the terms of the solicitation. The Government may reject as unacceptable proposals/quotations that do not conform to the solicitation.

Technical Acceptability: Technical acceptability will include a review of past performance and experience as defined in Section 3, along with any technical information provided by the offeror with its proposal/quotation.

Price Evaluation: The Government reserves the right to reject proposals that are unreasonably low or high in price.

Responsibility Determination: The Government will determine contractor responsibility by analyzing whether the apparent successful offeror complies with the requirements of FAR 9.1, including:

- Adequate financial resources or the ability to obtain them;
- Ability to comply with the required performance period, taking into consideration all existing commercial and governmental business commitments;
- Satisfactory record of integrity and business ethics;
- Necessary organization, experience, and skills or the ability to obtain them;
- Necessary equipment and facilities or the ability to obtain them; and
- Otherwise qualified and eligible to receive an award under applicable laws and regulations.

Bid Details

A complete bid shall include the following.

- An itemized, fixed price proposal.
- Evidence that the offeror/quoter can provide the necessary personnel, equipment, and financial resources needed to perform the work.
- Adequate insurance for the scope of the project.
- The offeror shall address its plan to obtain all licenses and permits required by local law.
- Information demonstrating the offeror's/quoter's ability to perform, including:
 - Name of a Project Manager
 - Evidence that the offeror/quoter operates an established business with a permanent address and telephone listing
 - List of clients over the past five (5) years, demonstrating prior experience with relevant past performance information and references (provide dates of contracts, places of performance, value of contracts, contact names, telephone and fax numbers and email addresses). Offerors are advised that the past performance information requested above may be discussed with the client's contact person. In addition, the client's contact person may be asked to comment on the offeror's:
 - Quality of services provided under the contract
 - Compliance with contract terms and conditions
 - Effectiveness of management
 - Willingness to cooperate with and assist the customer in routine matters, and when confronted by unexpected difficulties
 - Business integrity / business conduct

Note: The Government will use past performance information primarily to assess an offeror's capability to meet the solicitation performance requirements, including the relevance and successful performance of the offeror's work experience. The Government may also use this data to evaluate the credibility of the offeror's proposal. In addition, the Contracting Officer may use past performance information in making a determination of responsibility.

Payment

The US Government does not prepay for any work. Progress payments may be authorized as work progresses. Milestones for progress payments may be developed in conjunction with the Contracting Officer once work is awarded.